



THE AMERICAN UNIVERSITY

East Campus (Duber Hall, Constitution Hall, Federal Hall, and Don Myers Technology & Innovation Building)

LEED NC v2009

3500 Nebraska Ave NW, Washington D.C. 20016

BUILDING HISTORY

AU designed and built East Campus to accommodate more students in on-campus housing and expand administrative and academic space. East Campus houses about 590 students in Congressional, Constitution, and Federal residence halls. The site also contains the Don Myers Technology and Innovation Building, which is a two-story academic and administrative building. A mini market for students to purchase meals and groceries is located on site. Construction of East Campus began in the summer of 2014 the project was completed January 2017. Project designers decreased total available parking from 900 spots, moving some of the parking below ground as well, to create space for the four East Campus buildings.



PROJECT HIGHLIGHTS

LEED (™) Facts

American University, East Campus



Location.....	3500 Nebraska Ave NW, Washington D.C. 20016
Rating System.....	LEED NC v2009 Group Certification
Certification Achieved	Gold
Total Points Achieved.....	65

Sustainable Sites.....	24
Water Efficiency.....	6
Energy and Atmosphere	14
Materials and Resources.....	7
Indoor Environmental Quality.....	7
Innovation in Design.....	5
Regional Priority	2

- 100%** *Amount of green electricity used in the building*
- 97%** *Amount of on-site construction waste diverted from landfill*
- 43%** *Reduction in indoor potable water use compared to a standard building*
- 21%** *Amount, by value, of recycled material content used in construction*

Please only print this project if necessary. If printing is required, please print double sided and recycle when finished.

PROJECT TEAM

Owner: American University

Architect: Stantec

Contractor: Skanska



ADDITIONAL RESOURCES

Office of Sustainability:

www.american.edu/sustainability/

University Facilities:

www.american.edu/facilities/

U.S. Green Building Council:

www.usgbc.org

GBCI:

www.gbci.org

View details for all of AU's LEED buildings:

www.gbig.org/collections/18029



SUSTAINABLE SITES

By choosing a site that is close in proximity to amenities and that supports sustainable transportation, green buildings can reduce the impacts of greenhouse gas emissions and air pollution. East Campus contains several conveniences for occupants that don't require transportation. The East Campus site includes a market, fitness center, and nearby restaurants and banks. The site allows for easy access to the rest of Washington, D.C. via Metrobus as well as a university-run shuttle from campus to the metro station. In addition to public transportation, there are several secure bike racks and bike share locations located around the site.

The heat island effect occurs when areas have large amounts of black surfaces, making it several degrees hotter than the surrounding areas. This effect can be reduced through the use of light-colored roofs or green roofs on buildings. East Campus features 13,000 square feet of vegetative green roofs. In addition to minimizing the heat island effect, the green roofs also reduce site runoff by 38 percent.



WATER EFFICIENCY



Green buildings reduce the demand for water through design choices. East Campus has ultra low-flow faucets, toilets, and urinals that conserve water by having flush rates that are lower than standard fixtures. By using sustainable fixtures, East Campus uses 43 percent less water than a standard building, saving about five million gallons of water annually. Less water use means a decrease in the amount wastewater that goes to energy-intensive wastewater treatment facilities.

East Campus conserves water in the landscape by using native and adaptive plants. This landscaping technique reduces the need for irrigation on East Campus since the plants can be sustained without supplemental watering.

ENERGY AND ATMOSPHERE

Green buildings address environmental concerns by reducing the amount of energy required for building operations and using greener sources of energy. As part of its carbon neutrality efforts, AU is strongly committed to reducing energy use on campus and implementing alternative sources of energy. Generation from the solar installation in North Carolina in addition to renewable energy credits purchased makes 100% of AU campus electricity sourced from renewable energy.

In sustainable building design, high efficiency equipment, and energy conserving practices reduce the energy required to maintain buildings. Energy efficient lighting fixtures are used to further reduce the electricity use of East Campus. Additionally, sensors are located in all of the rooms on East Campus to turn lights on and off when motion is detected. With all of the energy-saving techniques on East Campus, the site is 27% more efficient than normal buildings.



MATERIALS AND RESOURCES

Sustainably sourcing building materials greatly reduces the environmental footprint of a project. East Campus construction used sustainably sourced, recycled, or reused materials that were either locally sourced or responsibly extracted and processed.

The construction of East Campus diverted 97% of construction waste from landfill through recycling and material reuse - equivalent to almost 11,000 tons of waste kept out of a landfill. The steel and concrete used in East Campus contains recycled materials, closing the loop of sourcing materials. Closed loop sourcing recycles existing materials and resources to make new ones. Additionally, 21% of materials were sourced locally, within a 500-mile radius of AU.

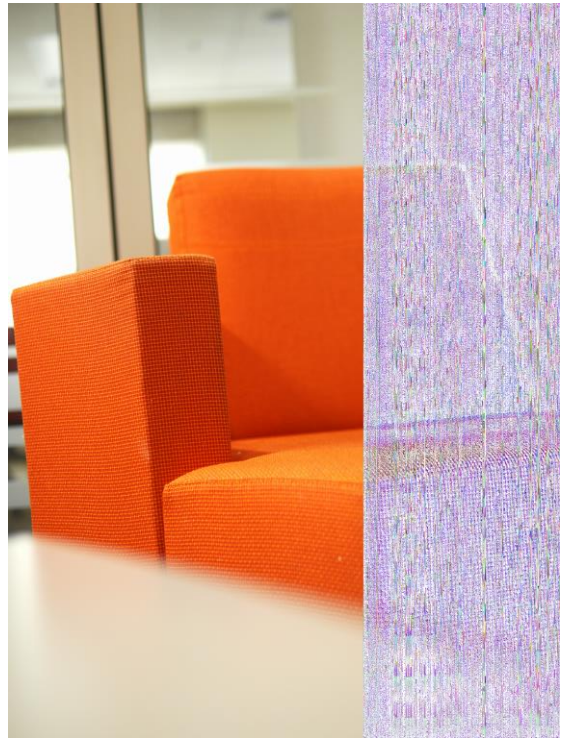
When the buildings are decommissioned, most of the materials from the building should be recycled or reused in another building process to continue the closed loop sourcing.



INDOOR ENVIRONMENTAL QUALITY

Indoor environmental quality is an important section of LEED because Americans spend about 90% of their time indoors. A healthy indoor environment allows for a better working and learning environment by providing optimum air quality, thermal comfort, acoustics, and lighting. In order to ensure the comfort of its occupants, the East Campus site utilizes a computerized thermostat to regulate the temperature, keeping the buildings in the site at a comfortable and uniform temperature for occupants throughout the day.

Additionally, East Campus uses sealants, paints, and furniture with low volatile organic compounds (VOCs). VOCs can negatively affect one's long-term health and cause complications to the respiratory and immune systems when inhaled. By using materials without them, East Campus provides a healthier environment for occupants. State of the art ventilation and air filtration are used to further ensure the safety and quality of the air in East Campus.



INNOVATION IN DESIGN



The innovation and design section of LEED recognizes efforts taken by American University that go above and beyond sustainable design standards. The East Campus project team included several features that further improve the quality of life for the occupants of the site.

The maintenance staff in East Campus exclusively follows green cleaning practices, ensuring not only their own wellbeing but the wellbeing of the building occupants. Labeled and color-coded bins are located around East Campus so that student, staff, and visitors can accurately separate their trash, increasing the amount of waste diverted from landfills. Outreach efforts such as sustainability campus tours provide campus visitors with an understanding of campus green buildings and sustainability efforts.

LEED SCORECARD



LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by Green Business Certification Inc. (GBCI®).

East Campus Group

Project ID 1000095251
Rating system & version LEED-NC
Project registration date 10/31/2016



Construction Final Review Decision

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

LEED 2009 NEW CONSTRUCTION

ATTEMPTED: 66, DENIED: 0, PENDING: 0, AWARDED: 65 OF 110 POINTS

SUSTAINABLE SITES 24 OF 26

SSp1	Construction Activity Pollution Prevention	Y
SSc1	Site Selection	1 / 1
SSc2	Development Density and Community Connectivity	5 / 5
SSc3	Brownfield Redevelopment	0 / 1
SSc4.1	Alternative Transportation-Public Transportation Access	6 / 6
SSc4.2	Alternative Transportation-Bicycle Storage and Changing Rooms	1 / 1
SSc4.3	Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles	3 / 3
SSc4.4	Alternative Transportation-Parking Capacity	2 / 2
SSc5.1	Site Development-Protect or Restore Habitat	1 / 1
SSc5.2	Site Development-Maximize Open Space	1 / 1
SSc6.1	Stormwater Design-Quantity Control	1 / 1
SSc6.2	Stormwater Design-Quality Control	1 / 1
SSc7.1	Heat Island Effect, Non-Roof	1 / 1
SSc7.2	Heat Island Effect-Roof	1 / 1
SSc8	Light Pollution Reduction	0 / 1

WATER EFFICIENCY 6 OF 10

WEp1	Water Use Reduction-20% Reduction	Y
WEc1	Water Efficient Landscaping	2 / 4
WEc2	Innovative Wastewater Technologies	0 / 2
WEc3	Water Use Reduction	4 / 4

ENERGY AND ATMOSPHERE 14 OF 35

EAp1	Fundamental Commissioning of the Building Energy Systems	Y
EAp2	Minimum Energy Performance	Y
EAp3	Fundamental Refrigerant Mgmt	Y
EAc1	Optimize Energy Performance	8 / 19
EAc2	On-Site Renewable Energy	0 / 7
EAc3	Enhanced Commissioning	2 / 2
EAc4	Enhanced Refrigerant Mgmt	2 / 2
EAc5	Measurement and Verification	0 / 3
EAc6	Green Power	2 / 2

MATERIALS AND RESOURCES 7 OF 14

MRp1	Storage and Collection of Recyclables	Y
MRC1.1	Building Reuse-Maintain Existing Walls, Floors and Roof	0 / 3
MRC1.2	Building Reuse - Maintain 50% of Interior Non-Structural Elements	0 / 1
MRC2	Construction Waste Mgmt	2 / 2
MRC3	Materials Reuse	0 / 2
MRC4	Recycled Content	2 / 2
MRC5	Regional Materials	2 / 2
MRC6	Rapidly Renewable Materials	0 / 1
MRC7	Certified Wood	1 / 1

INDOOR ENVIRONMENTAL QUALITY 7 OF 15

IEQp1	Minimum IAQ Performance	Y
IEQp2	Environmental Tobacco Smoke (ETS) Control	Y
IEQc1	Outdoor Air Delivery Monitoring	1 / 1
IEQc2	Increased Ventilation	0 / 1
IEQc3.1	Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2	Construction IAQ Mgmt Plan-Before Occupancy	0 / 1
IEQc4.1	Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2	Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3	Low-Emitting Materials-Flooring Systems	1 / 1
IEQc4.4	Low-Emitting Materials-Composite Wood and Agrifiber Products	0 / 1
IEQc5	Indoor Chemical and Pollutant Source Control	1 / 1
IEQc6.1	Controllability of Systems-Lighting	0 / 1
IEQc6.2	Controllability of Systems-Thermal Comfort	0 / 1
IEQc7.1	Thermal Comfort-Design	1 / 1
IEQc7.2	Thermal Comfort-Verification	0 / 1
IEQc8.1	Daylight and Views-Daylight	0 / 1
IEQc8.2	Daylight and Views-Views	0 / 1

INNOVATION IN DESIGN 5 OF 6

IDc1.1	Green Cleaning	1 / 1
IDc1.1	Innovation in Design	0 / 1
IDc1.2	MRC2 Construction Waste Mgmt	1 / 1
IDc1.2	Innovation in Design	0 / 1
IDc1.3	EAc6 Green Power	1 / 1
IDc1.3	Innovation in Design	0 / 1
IDc1.4	Green Building Education	1 / 1
IDc1.4	Innovation in Design	0 / 1
IDc1.5	Innovation in Design	0 / 1
IDc1.5	Innovation in Design	0 / 1
IDc2	LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS 2 OF 4

SSc5.1	Site Development-Protect or Restore Habitat	1 / 1
SSc6.1	Stormwater Design-Quantity Control	1 / 1

TOTAL

65 OF 110